

Amendments to the Claims

1. (Previously presented) An apparatus for determining leakage in an evaporated fuel processing system, the evaporated fuel processing system extending from a fuel tank through a canister to a purge passage through which evaporated fuel from the fuel tank is purged to an intake manifold of an engine, the canister comprising a vent-shut valve that communicates with the atmosphere, the apparatus comprising:

a pressure sensor for detecting a pressure of the evaporated fuel processing system;

a control unit connected to the pressure sensor, the control unit configured to:

detect a stop of the engine;

close the vent-shut valve to close the evaporated fuel processing system after the stop of the engine is detected;

determine whether the evaporated fuel processing system has leakage after the evaporated fuel processing system is closed based on the detected pressure and a predetermined determination value; and

prohibit the leakage determination if the detected pressure is not within a predetermined range,

wherein the predetermined range is based on a pressure range within which the vent-shut valve can open.

2. (Cancelled)

3. (Previously presented) The apparatus of claim 1, wherein the pressure range within which the vent-shut valve can open is based on a biasing force of a spring of the vent-shut valve..

4. (Original) The apparatus of claim 3, wherein the spring of the vent-shut valve is provided in the atmosphere side relative to a valve seat at which the vent-shut valve is seated,

wherein the control unit is further configured to:

prohibit the leakage determination if the detected pressure is greater than a predetermined positive pressure.

5. (Original) The apparatus of claim 3, wherein the spring of the vent-shut valve is provided in the canister side relative to a valve seat at which the vent-shut valve is seated,

wherein the control unit is further configured to:

prohibit the leakage determination if the detected pressure is lower than a predetermined negative pressure.

6. (Currently amended) A method for determining leakage in an evaporated fuel processing system, the evaporated fuel processing system extending from a fuel tank through a canister to a purge passage through which evaporated fuel from the fuel

tank is purged to an intake manifold of an engine, the canister comprising a vent-shut valve that communicates with the atmosphere, comprising the steps of:

detecting a pressure of the evaporated fuel processing system;

detecting a stop of the engine;

closing the vent-shut valve to close the evaporated fuel processing system after the stop of the engine is detected;

determining whether the evaporated fuel processing system has leakage after the evaporated fuel processing system is closed based on the detected pressure and a predetermined determination value; and

prohibiting the leakage determination if the detected pressure is not within a predetermined range,

wherein the predetermined range is based on a pressure range within which the vent-shut valve can open.

7. (Cancelled)

8. (Currently amended) The method of claim ~~7~~ 6, further comprising the step of defining the pressure range within which the vent-shut valve can open based on a biasing force of a spring of the vent-shut valve.

9. (Original) The method of claim 8, wherein the spring of the vent-shut valve is provided in the atmosphere side relative to a valve seat at which the vent-shut valve is seated,

wherein the step of prohibiting the leakage determination further comprises the step of prohibiting the leakage determination if the detected pressure is greater than a predetermined positive pressure.

10. (Original) The method of claim 8, wherein the spring of the vent-shut valve is provided in the canister side relative to a valve seat at which the vent-shut valve is seated,

wherein the step of prohibiting the leakage determination further comprises the step of prohibiting the leakage determination if the detected pressure is lower than a predetermined negative pressure.

11. (Previously presented) A computer program stored on a computer readable medium for use in determining leakage in an evaporated fuel processing system, the evaporated fuel processing system extending from a fuel tank through a canister to a purge passage through which evaporated fuel from the fuel tank is purged to an intake manifold of an engine, the canister comprising a vent-shut valve that communicates with the atmosphere, the computer program comprising:

program code for receiving a pressure of the evaporated fuel processing system from a pressure sensor;

program code for detecting a stop of the engine;

program code for closing the vent-shut valve to close the evaporated fuel processing system after the stop of the engine is detected;

program code for determining whether the evaporated fuel processing system has leakage after the evaporated fuel processing system is closed based on the detected pressure and a predetermined determination value; and

program code for prohibiting the leakage determination if the detected pressure is not within a predetermined range,

wherein the predetermined range is based on a pressure range within which the vent-shut valve can open.

12. (Cancelled)

13. (Previously presented) The computer program of claim 11, wherein the pressure range within which the vent-shut valve can open is based on a biasing force of a spring of the vent-shut valve.

14. (Previously presented) The computer program of claim 13, wherein the spring of the vent-shut valve is provided in the atmosphere side relative to a valve seat at which the vent-shut valve is seated,

wherein the program code for prohibiting the leakage determination further comprises program code for prohibiting the leakage determination if the detected pressure is greater than a predetermined positive pressure.

15. (Previously presented) The computer program of claim 13, wherein the spring of the vent-shut valve is provided in the canister side relative to a valve seat at which the vent-shut valve is seated,

wherein the program code for prohibiting the leakage determination further comprises program code for prohibiting the leakage determination if the detected pressure is lower than a predetermined negative pressure.

16. (Currently amended) An apparatus for determining leakage in an evaporated fuel processing system, the evaporated fuel processing system extending from a fuel tank through a canister to a purge passage through which evaporated fuel from the fuel tank is purged to an intake manifold of an engine, the canister comprising a vent-shut valve that communicates with the atmosphere, the apparatus comprising:

a pressure sensor for detecting a pressure of the evaporated fuel processing system;

means for detecting a stop of the engine;

means for closing the vent-shut valve to close the evaporated fuel processing system after the stop of the engine is detected;

means for determining whether the evaporated fuel processing system has leakage after the evaporated fuel processing system is closed based on the detected pressure and a predetermined determination value; and

means for prohibiting the leakage determination if the detected pressure is not within a predetermined range,

wherein the predetermined range is based on a pressure range within which the vent-shut valve can open.

17. (Cancelled)

18. (Currently amended) The apparatus of claim ~~17~~ 16, wherein the pressure range within which the vent-shut valve can open is based on a biasing force of a spring of the vent-shut valve.

19. (Original) The apparatus of claim 18, wherein the spring of the vent-shut valve is provided in the atmosphere side relative to a valve seat at which the vent-shut valve is seated,

wherein the means for prohibiting the leakage determination further comprises means for prohibiting the leakage determination if the detected pressure is greater than a predetermined positive pressure.

20. (Original) The apparatus of claim 18, wherein the spring of the vent-shut valve is provided in the canister side relative to a valve seat at which the vent-shut valve is seated,

wherein the means for prohibiting the leakage determination further comprises means for prohibiting the leakage determination if the detected pressure is lower than a predetermined negative pressure.